

PATENT  
USSN 09/721,506  
002616US; 018-210c

CLAIM AMENDMENTS

1 to 72. *Cancelled*

73. *(Withdrawn) (Currently amended)* A synthetic or recombinant telomerase reverse transcriptase (TRT) protein ~~or a variant thereof, or a fragment thereof, wherein the protein, variant or fragment that~~ contains a sequence that is at least 80% identical to SEQ. ID NO:2, and has telomerase catalytic activity when complexed with a telomerase RNA.

74. *Cancelled*

75. *(Currently amended)* An isolated, synthetic, substantially pure, or recombinant polynucleotide comprising a nucleic acid sequence that encodes ~~the protein, variant or fragment of claim 73 a~~ telomerase reverse transcriptase (TRT) protein, or the complement of said nucleic acid sequence wherein said TRT protein has telomerase catalytic activity when complexed with a telomerase RNA; and contains an amino acid sequence that is at least 80% identical to SEQ. ID NO:2.

76. *(Currently amended)* The polynucleotide of claim 75, comprising a promoter sequence operably linked to the sequence that encodes the protein ~~variant or fragment~~.

77. *(Currently amended)* ~~A isolated~~ An isolated cell comprising the recombinant polynucleotide of claim 75.

78. *(Previously presented)* The cell of claim 77, which is a eukaryotic cell.

79. *Cancelled*

80. *(Withdrawn)* A method of increasing the proliferative capacity of a cell, comprising expressing in the cell a polynucleotide according to claim 75.

81. *(Withdrawn) (Currently amended)* A synthetic or recombinant ~~telomerase reverse transcriptase~~ TRT protein ~~or a variant thereof, or a fragment thereof, wherein the protein, variant or fragment that~~ contains a sequence that is at least 90% identical to SEQ. ID NO:2, and has telomerase catalytic activity when complexed with a telomerase RNA.

82. *Cancelled*

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83. *(Currently amended)* An isolated, synthetic, substantially pure, or recombinant polynucleotide comprising a nucleic acid sequence that encodes the protein, variant or fragment of claim 81 an TRT protein, or the complement of said nucleic acid sequence wherein said TRT protein has telomerase catalytic activity when complexed with a telomerase RNA; and contains an amino acid sequence that is at least 90% identical to SEQ. ID NO:2.
84. *(Previously presented)* The polynucleotide of claim 83, comprising a promoter sequence operably linked to the sequence that encodes the protein, variant or fragment.
85. *(Currently amended)* ~~A-isolated~~ An isolated cell comprising the recombinant polynucleotide of claim 83.
86. *(Previously presented)* The cell of claim 85, which is a eukaryotic cell.
87. *Cancelled*
88. *(Withdrawn)* A method of increasing the proliferative capacity of a cell, comprising expressing in the cell a polynucleotide according to claim 83.
89. *(Withdrawn)* *(Currently amended)* A synthetic or recombinant ~~telomerase reverse transcriptase~~ TRT protein, or a variant thereof, or a fragment thereof, ~~wherein the protein, variant or fragment that~~ contains a sequence that is at least 80% identical to 500 contiguous amino acids in SEQ. ID NO:2, and wherein the protein has reverse transcriptase activity when complexed with a telomerase RNA.
90. *Cancelled*
91. *(Currently amended)* An isolated, synthetic, substantially pure, or recombinant polynucleotide comprising a nucleic acid sequence that encodes the protein, variant or fragment of claim 89 an TRT protein, or the complement of said nucleic acid sequence. wherein said TRT protein has telomerase catalytic activity when complexed with a telomerase RNA; and contains an amino acid sequence that is at least 80% identical to 500 contiguous amino acids in SEQ. ID NO:2.
92. *(Previously presented)* The polynucleotide of claim 91, comprising a promoter sequence operably linked to the sequence that encodes the protein, variant or fragment.

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93. *(Currently amended)* ~~A isolated~~ An isolated cell comprising the recombinant polynucleotide of claim 91.

94. *(Previously presented)* The cell of claim 93, which is a eukaryotic cell.

95. *Cancelled*

96. *(Withdrawn)* A method of increasing the proliferative capacity of a cell, comprising expressing in the cell a polynucleotide according to claim 91.

97 to 100. *Cancelled*

101. *(Currently amended)* The polynucleotide of claim 75, ~~comprising a nucleic acid sequence that encodes the protein, variant or fragment of claim 97 wherein said TRT protein contains a sequence that is at least 95% identical to 100 contiguous amino acids in SEQ. ID NO:2.~~

102. *(Currently amended)* The polynucleotide of claim 75, ~~comprising a nucleic acid sequence that encodes the protein, variant or fragment of claim 98 wherein said TRT protein contains a sequence that is at least 98% identical to 100 contiguous amino acids in SEQ. ID NO:2.~~

103. *(Currently amended)* The polynucleotide of claim 75, ~~comprising a nucleic acid sequence that encodes the protein, variant or fragment of claim 99 wherein said TRT protein contains a sequence that is at least 95% identical to 500 contiguous amino acids in SEQ. ID NO:2.~~

104. *(Currently amended)* The polynucleotide of claim 75, ~~comprising a nucleic acid sequence that encodes the protein, variant or fragment of claim 100 wherein said TRT protein contains a sequence that is at least 98% identical to 500 contiguous amino acids in SEQ. ID NO:2.~~